Mr. Georg F. Weigand Total Industries, Int'l. A Division of Total Enterprises, Ltd. P.O. Box 3607 South Bend, Indiana 46619

Re: Significant Source Modification No: 141-11172-00120

#### Dear Mr. Weigand:

Total Industries, Int'l. A Division of Total Enterprises, Ltd. applied for a Part 70 operating permit on July 2, 1996 for a stationary aluminum mold making operation. An application to modify the source was received on July 20, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) one (1) gas-electric hybrid furnace with electric ladle (ID Unit No. FF5), with a maximum heat input capacity of 0.8 MMBtu per hour, and a maximum capacity to melt 475 pounds of aluminum per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3); and
- (b) one (1) 3-part phenolic urethane resin mixing system (ID Unit No. PalmerSM), with a maximum capacity to produce 758.6 pounds of foundry sand molds per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3).

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(I)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Trish Earls, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, ext. 3219, or call (800) 451-6027, press 0 and ask for Duane Van Laningham or extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

Attachments TE/EVP

cc: File - St. Joseph County U.S. EPA, Region V

St. Joseph County Health Department

Air Compliance Section Inspector Paul Karkiewicz

Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley

Technical Support and Modeling - Michele Boner

# PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT and ST. JOSEPH COUNTY HEALTH DEPARTMENT

Total Industries, Int'l.

A Division of Total Enterprises, Ltd.
3333 West Lathrop Drive
South Bend, Indiana 46619

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 141-11172-00120			
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:		

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### Certification Quarterly Report

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#### **SECTION A**

#### **SOURCE SUMMARY**

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and the St. Joseph County Health Department. The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary aluminum mold making operation.

Responsible Official: George F. Weigand

Source Address: 3333 West Lathrop Drive, South Bend, Indiana 46619

Mailing Address: P.O. Box 3607, South Bend, Indiana 46619

Phone Number: 219-232-7484

SIC Code: 3599

County Location: St. Joseph County

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) one (1) gas-electric hybrid furnace with electric ladle (ID Unit No. FF5), with a maximum heat input capacity of 0.8 MMBtu per hour, and a maximum capacity to melt 475 pounds of aluminum per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3); and
- (b) one (1) 3-part phenolic urethane resin mixing system (ID Unit No. PalmerSM), with a maximum capacity to produce 758.6 pounds of foundry sand molds per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3).

#### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

#### SECTION B GENERAL CONSTRUCTION CONDITIONS

#### B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

#### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana Permit Reviewer: TE/EVP

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(3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana

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#### SECTION C

#### **GENERAL OPERATION CONDITIONS**

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- Where specifically designated by this approval or required by an applicable requirement. any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- One (1) certification shall be included, on the attached Certification Form, with each (b) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions:
  - Identification and quantification of the replacement parts that will be maintained (3) in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department County-City Building, Room 914 South Bend, Indiana 46601-1870

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- PMP's shall be submitted to IDEM, OAM, and the St. Joseph County Health Department (c) upon request and shall be subject to review and approval by IDEM, OAM, and the St. Joseph County Health Department. IDEM, OAM, and the St. Joseph County Health Department may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

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#### Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] C.3

- The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- Any application requesting an amendment or modification of this approval shall be (b) submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department County-City Building, Room 914 South Bend, Indiana 46601-1870

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

The Permittee may implement administrative amendment changes addressed in the (c) request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

#### C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

- Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute (a) averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A. Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### Testing Requirements [326 IAC 2-7-6(1)]

#### C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

Compliance testing on new emission units shall be conducted within 60 days after (a) achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

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A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department County-City Building, Room 914 South Bend. Indiana 46601-1870

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM, and the St. Joseph County Health Department within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, and the St. Joseph County Health Department, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

#### C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department County-City Building, Room 914 South Bend, Indiana 46601-1870

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

 $\label{total Industries, Int'l. A Division of Total Enterprises, Ltd. \\ South Bend, Indiana$ 

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#### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.8 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this approval exceed the level specified in any condition of this
    approval, the Permittee shall take appropriate corrective actions. The Permittee shall
    submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of
    receipt of the test results. The Permittee shall take appropriate action to minimize
    emissions from the affected facility while the corrective actions are being implemented.
    IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions
    taken are deficient. The Permittee shall submit a description of additional corrective
    actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency.
    IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant
    stack tests.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.9 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
  - (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
  - (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
  - (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
  - (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
  - (e) At its discretion, IDEM and the St. Joseph County Health Department may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
  - (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana
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#### C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, and St. Joseph County Health Department representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the St. Joseph County Health Department makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the St. Joseph County Health Department within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this approval;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana
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#### C.11 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

St. Joseph County Health Department County-City Building, Room 914 South Bend, Indiana 46601-1870

- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and the St. Joseph County Health Department on or before the date it is due.
- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

Permit Reviewer: TE/EVP

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

**SECTION D.1** 

one (1) gas-electric hybrid furnace with electric ladle (ID Unit No. FF5), with a maximum heat (a) input capacity of 0.8 MMBtu per hour, and a maximum capacity to melt 475 pounds of aluminum per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Particulate Emissions Limitations), the particulate matter emissions from the melt furnace FF5 shall be limited to 0.03 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 0.44 pounds per hour based on an exhaust air flow rate of 1,704 dry standard cubic feet per minute (dscfm)

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#### **Compliance Determination Requirements**

#### Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or the St. Joseph County Health Department, compliance with the PM limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana

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#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

(b) one (1) 3-part phenolic urethane resin mixing system (ID Unit No. PalmerSM), with a maximum capacity to produce 758.6 pounds of foundry sand molds per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The total usage of VOC, including all phenolic resins and solvents, in the 3-part phenolic urethane resin mixing system (ID PalmerSM) shall be limited to 24 tons per twelve (12) consecutive month period, rolled on a monthly basis. This will limit VOC emissions to less than 25 tons per year, therefore, the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) do not apply.

#### **Compliance Determination Requirements**

#### D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or the St. Joseph County Health Department, compliance with the VOC limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the resin or solvent manufacturer. IDEM, OAM, and the St. Joseph County Health Department reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.2.4 VOC Emissions

Compliance with Condition D.2.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1.
  - (1) The amount and VOC content of each resin and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
  - (2) A log of the dates of use;
  - (3) The volume weighted VOC content of the material used for each month;

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana
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- (4) The cleanup solvent usage for each month;
- (5) The total VOC usage for each month; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana Permit Reviewer: TE/EVP

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION and ST. JOSEPH COUNTY HEALTH DEPARTMENT

## PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Total Industries, Int'l. A Division of Total Enterprises, Ltd. Source Address: 3333 West Lathrop Drive, South Bend, Indiana 46619

Mailing Address: P.O. Box 3607, South Bend, Indiana 46619

Source Modification No.: 141-11172-00120
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.
Please check what document is being certified:
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.  Signature:
Signature.
Printed Name:
Title/Position:
Date:

 $\label{total Industries, Int'l. A Division of Total Enterprises, Ltd. \\ South Bend, Indiana$ 

Phone:

Permit Reviewer: TE/EVP

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION and ST. JOSEPH COUNTY HEALTH DEPARTMENT

#### Part 70 Source Modification Quarterly Report

Г	art 70 Source W	odification Quarterly	Report			
Source Name:  Source Address:  Mailing Address:  Source Modification No.:  Facility:  Parameter:  Limit:  Total Industries, Int'l. A Division of Total Enterprises, Ltd.  3333 West Lathrop Drive, South Bend, Indiana 46619  P.O. Box 3607, South Bend, Indiana 46619  141-11172-00120  3-part Phenolic Urethane Resin Mixing System (ID PalmerSM)  Volatile Organic Compounds (VOC)  The total usage of VOC, including all phenolic resins and solvents, in the solution of Total Enterprises, Ltd.  3333 West Lathrop Drive, South Bend, Indiana 46619  P.O. Box 3607, South Bend, Indiana 46619  141-11172-00120  3-part Phenolic Urethane Resin Mixing System (ID PalmerSM)  Volatile Organic Compounds (VOC)  The total usage of VOC, including all phenolic resins and solvents, in the solution of Total Enterprises, Ltd.  3333 West Lathrop Drive, South Bend, Indiana 46619  P.O. Box 3607, South Bend, Indiana 46619  141-11172-00120  3-part Phenolic Urethane Resin Mixing System (ID PalmerSM)  Volatile Organic Compounds (VOC)  The total usage of VOC, including all phenolic resins and solvents, in the solution of Total Enterprises, Ltd.  3333 West Lathrop Drive, South Bend, Indiana 46619  P.O. Box 3607, South Bend, Indiana 46619  141-11172-00120  3-part Phenolic Urethane Resin Mixing System (ID PalmerSM)  Volatile Organic Compounds (VOC)  The total usage of VOC, including all phenolic resins and solvents, in the solution of Total Enterprises, Ltd.						
	Column 1	Column 2	Column 1 + Column 2			
Month	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)			
9 I	·	this quarter. orted on:				
Title /	/ Position:ature:					

## Indiana Department of Environmental Management Office of Air Management

#### Addendum to the

Technical Support Document for a Part 70 Significant Source Modification

Source Name: Total Industries, Int'l. A Division of Total Enterprises,

Ltd.

Source Location: 3333 West Lathrop Drive, South Bend, Indiana 46619

County: St. Joseph SIC Code: 3599

Significant Source Modification No.: 141-11172-00120 Permit Reviewer: Trish Earls/EVP

On August 17, 1999, the Office of Air Management (OAM) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that Total Industries, Int'l. A Division of Total Enterprises, Ltd. had applied for a Significant Source Modification for the construction of a gas-electric hybrid foundry furnace for melting aluminum and a 3-part phenolic urethane resin mixing system to be added to their existing plant. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit:

1. Condition C.4 of the permit listed the incorrect opacity limitation for this source, which is located in the portion of St. Joseph County listed in 326 IAC 5-1-1(c)(6). The revised condition listing the correct opacity limitation pursuant to 326 IAC 5-1-2(2) for sources in the applicable portion of St. Joseph County is as follows (deletions in strikeout, additions in bold):

#### C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

# Indiana Department of Environmental Management Office of Air Management and St. Joseph County Health Department

Technical Support Document (TSD) for a Part 70 Significant Source Modification.

#### **Source Background and Description**

Source Name: Total Industries, Int'l. A Division of Total Enterprises, Ltd.
Source Location: 3333 West Lathrop Drive, South Bend, Indiana 46619

County: St. Joseph SIC Code: 3599

Source Modification No.: 141-11172-00120
Permit Reviewer: Trish Earls/EVP

The Office of Air Management (OAM) has reviewed a modification application from Total Industries, Int'l. A Division of Total Enterprises, Ltd., relating to the construction of the following emission units and pollution control devices:

- (a) one (1) gas-electric hybrid furnace with electric ladle (ID Unit No. FF5), with a maximum heat input capacity of 0.8 MMBtu per hour, and a maximum capacity to melt 475 pounds of aluminum per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3); and
- (b) one (1) 3-part phenolic urethane resin mixing system (ID Unit No. PalmerSM), with a maximum capacity to produce 758.6 pounds of foundry sand molds per hour, exhausting through three (3) stacks (ID Nos. M1, M2, and M3).

#### **History**

On July 2, 1996, Total Industries, Int'I. submitted a Part 70 permit application to the OAM, which is still pending. The Part 70 permit application included information on the construction of an additional gas-electric hybrid foundry furnace for melting aluminum and a 3-part phenolic urethane resin mixing system to be added to their existing plant. On July 20, 1999, a written request was received from Total Industries requesting that permitting of these units be separated and expedited prior to the issuance of the Part 70 permit through the issuance of a Significant Source Modification.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Stack Summary**

Stack ID	Operation	Height	Diameter	Flow Rate	Temperature
		(feet)	(feet)	(acfm)	(°F)
M1	Furnace & Resin Mixing	20.58	4.0	1,750	68
M2	Furnace & Resin Mixing	20.58	4.0	1,750	68
M3	Furnace & Resin Mixing	20.58	4.0	1,750	68

#### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 20, 1999.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (4 pages).

#### **Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)		
PM	0.01		
PM-10	0.03		
SO <sub>2</sub>	0.02		
VOC	79.52		
CO	0.29		
NO <sub>x</sub>	0.19		

HAP's	Potential To Emit (tons/year)
Xylene	0.66
Phenol	6.48
TOTAL	7.14

#### **Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 25 tons per year, therefore, this modification is being performed pursuant to 326 IAC 2-7-10.5(g).

#### **County Attainment Status**

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as maintenance for ozone since November, 1994. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) St. Joseph County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
  Since this type of operation is not one of the 28 listed source categories under 326 IAC
  2-2 and since there are no applicable New Source Performance Standards that were in
  effect on August 7, 1980, the fugitive PM emissions are not counted toward
  determination of PSD and Emission Offset applicability.

#### **Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	160.90
PM-10	115.92
SO <sub>2</sub>	0.04
VOC	7.33
СО	0.62
NOx	0.75

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Technical Support Document for the pending Title V Operating Permit No. T141-6217-00120.

Permit Reviewer: TE/EVP

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM PM-10 SO <sub>2</sub> VOC CO NO <sub>X</sub> HAPs					
Foundry Furnace	0.01	0.03	0.02	0.17	0.29	0.19	0.0
Resin Mixing	0.0	0.0	0.0	24.0	0.0	0.0	2.16
Total Emissions	0.01	0.03	0.02	24.17	0.29	0.19	2.16
PSD Significant Level	250	250	250	250	250	250	N/A

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

#### State Rule Applicability - Individual Facilities

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-1-2 (Particulate Emissions Limitations)

The particulate matter emissions from the one (1) melt furnace (ID No. FF5) are subject to the requirements of 326 IAC 6-1-2 (Particulate Emissions Limitations) because this source is located in St. Joseph county and has the potential to emit greater than 100 tons per year of particulate matter. The rule requires that the particulate matter emissions from each facility be limited to 0.03 gr/dscf. This is equivalent to a particulate matter emission rate of 0.44 pounds per hour from the melt furnace FF5 based on an exhaust air flow rate of 1,704 dry standard cubic feet per minute (dscfm). Potential particulate matter emissions from the melt furnace FF5 are less than the allowable emissions pursuant to this rule, therefore, this units is in compliance with the rule (see Appendix A, page 2).

Pursuant to 326 IAC 6-1-4(b), testing of the new melt furnace identified as FF5 is not required because potential PM emissions are less than 40 tons per year and the unit does not require a

Total Industries, Int'l. A Division of Total Enterprises, Ltd. South Bend, Indiana Permit Reviewer: TE/EVP

control device to achieve compliance with the PM limit.

#### 326 IAC 6-3-2 (Process Operations)

The melt furnace FF5 is not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is not consistent with applicable limitations in 326 IAC 6-1 or 326 IAC 12. Since the applicable PM limit established by 326 IAC 6-1-2 for this unit is less than the PM limit that would be established by 326 IAC 6-3-2, the more stringent limit applies and the limit pursuant to 326 IAC 6-3-2 does not apply.

#### 326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The 3-part phenolic urethane resin mixing system is not subject to the requirements of 326 IAC 8-1-6 because the usage of VOC shall be limited such that potential VOC emissions from this operation are limited to less than 25 tons per year. There is no monomer in this polyurethane resin, therefore, there are no flash off factors associated with VOC emissions from this system.

No other Article 8 rules apply.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification:

#### Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 141-11172-00120.

#### **Appendix A: Emission Calculations Summary**

Company Name: Total Industries, Int'l., A Division of Total Enterprises, Ltd.

Address City IN Zip: 3333 West Lathrop Drive, South Bend, Indiana 46619

Significant Source Mod. No.: 141-11172

Plt ID: 141-00120
Reviewer: Trish Earls/EVP
Date: July 20, 1999

Uncontrolled Potential Emissions (tons/year)					
	Em	nissions Generating Activity	1		
Pollutant Foundry Furnace Natural Gas Resin Mixing Combustion System					
PM	0.00	0.01	0.00	0.01	
PM10	0.00	0.03	0.00	0.03	
SO2	0.02	0.00	0.00	0.02	
NOx	0.01	0.18	0.00	0.19	
VOC	0.15	0.02	79.35	79.52	
CO	0.00	0.29	0.00	0.29	
total HAPs	0.00	0.00	7.14	7.14	
worst case single HAP	0.00	0.00	6.48	6.48	
Fotal emissions based on rated capacity at 8,760 hours/year.					

#### Controlled Potential Emissions (tons/year)

Emissions Generating Activity					
Pollutant	Foundry Furnace	Natural Gas	Resin Mixing	TOTAL	
		Combustion	System		
PM	0.00	0.01	0.00	0.0	
PM10	0.00	0.03	0.00	0.0	
SO2	0.02	0.00	0.00	0.02	
NOx	0.01	0.18	0.00	0.19	
VOC	0.15	0.02	24.00	24.1	
CO	0.00	0.29	0.00	0.29	
total HAPs	0.00	0.00	2.16	2.10	
worst case single HAP	0.00	0.00	1.96	1.9	

Total emissions based on limited VOC usage (24 tons per 12 month period) for the Resin Mixing System at 8,760 hours/year.

#### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler

Company Name: Total Industries, Int'l., A Division of Total Enterprises, Ltd.

Address City IN Zip: 3333 West Lathrop Drive, South Bend, Indiana 46619

Significant Source Mod. No.: 141-11172

Plt ID: 141-00120
Reviewer: Trish Earls/EVP
Date: July 20, 1999

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

0.8

Heat Input Capacity includes:

one (1) 0.8 MMBtu/hr gas-electric hybrid foundry furnace (ID Unit No. FF5) with a low NOx burner.

#### Pollutant

	PM*	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0	5.5	84.0
				*see below		
Potential Emission in tons/yr	0.01	0.03	0.00	0.18	0.02	0.29

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factors are condensable and filterable.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 5 for HAPs emissions calculations.

#### 326 IAC 6-1-2 Compliance Calculation

Stacks M1, M2, and M3 (all three stacks identical)

0.01 ton/yr *	2000 lb/ton *	7000 gr/lb =	0.0001 gr/dscf	(will comply)
525,600 min/yr *	1,704 dscf/min			

llowable particulate emissions under 326 IAC 6-1-2 equate to 1.92 tons per year, or 0.44 lbs/hr.

Note:

SCFM = 1,750 acfm \* (460 + 68)\*(1-0.0261) / (460 + 68)

Assumes exhaust gas temperature of 68F, exhaust gas moisture content of 2.61% and exhaust gas flow of 1,750 acfm.

#### Page 3 of 4 TSD App A

### Appendix A: Secondary Metal Production Aluminum

Company Name: Total Industries, Int'l., A Division of Total Enterprises, Ltd.

Address City IN Zip: 3333 West Lathrop Drive, South Bend, Indiana 46619

Significant Source Mod. No.: 141-11172

 PIt ID:
 141-00120

 Reviewer:
 Trish Earls/EVP

 Date:
 July 20, 1999

SCC# 3-04-001-14 gas-electric hybrid furnace (FF5) Pouring/Casting						
TYPE OF MATERIAL		Throughput LBS/HR	1 TON/2000 lbs	TON/HR		
Aluminum	]	475	2000	0.2375		
	PM lbs/ton metal produced	PM10 lbs/ton metal produced	SOx lbs/ton metal produced	NOx lbs/ton metal produced	VOC lbs/ton metal produced	CO lbs/tons metal produced
	<del></del>		0.02	0.01	0.14	<del></del>
Potential Emissions Ibs/hr			0.00	0.00	0.03	
Potential Emissions lbs/day			0.11	0.06	0.80	
Potential Emissions tons/year			0.02	0.01	0.15	

Note: Emission factors from FIRE version 6.01

#### Appendix A: Emissions Calculations Volatile Organic Compounds (VOC) From 3-Part Phenolic Urethane Resin Mixing System

Company Name: Total Industries, Int'l., A Division of Total Enterprises, Ltd.

Address City IN Zip: 3333 West Lathrop Drive, South Bend, Indiana 46619

Significant Source Mod. No.: 141-11172

Plt ID: 141-00120
Reviewer: Trish Earls/EVP
Date: July 20, 1999

Material	Weight %	Weight %	Weight %	Maximum Usage	Potential	Potential	Potential
	Volatile	Water	Organics	(lb/hr)	VOC pounds	VOC pounds	VOC tons
	(H20&				per hour	per day	per year
	Organics)						
23-414 Techniset Coreactant	29.00%	0.0%	29.0%	15.0000	4.35	104.40	19.05
17-712 Techniset Activator	90.00%	0.0%	90.0%	3.3750	3.04	72.90	13.30
20-463 Techniset	58.00%	0.0%	58.0%	18.5000	10.73	257.52	47.00
			Total Date	tial Fiaaiaa	40.40	424.92	
			TOTAL POL	ential Emissions:	18.12	434.82	79.35
			TOTAL POLE	entiai Emissions:	10.12	434.82	79.35
			Total Pote	Material Usage	Controlled	Controlled	Controlled
			Total Pote				
			Total Pote	Material Usage	Controlled	Controlled	Controlled
			Total Folk	Material Usage Limitation	Controlled VOC lbs	Controlled VOC lbs	Controlled VOC tons

Note: At a 30.25% annual material usage limitation, potential VOC emissions are limited to 24 tons per year to avoid the requirements of 326 IAC 8-1-6.

#### **METHODOLOGY**

Potential VOC Pounds per Hour = Maximum Usage (lbs/hr) \* Weight % Organics

Potential VOC Pounds per Day = Potential VOC (lb/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per hour \* (8760 hr/yr) \* (1 ton/2000 lbs)

Total = Sum of all solvents used

#### Hazardous Air Pollutants (HAPs)

Material	Weight %	Weight %	Weight %	Maximum Usage	Potential	Potential	Potential		
	Xylene	MDI*	Phenol	(lb/hr)	Xylene	MDI	Phenol		
					Emissions	Emissions	Emissions		
					(ton/yr)	(ton/yr)	(ton/yr)		
23-414 Techniset Coreactant	1.0%	33.0%	0.0%	15.0000	0.66	0.00	0.00		
		<del> </del>							
17-712 Techniset Activator	0.0%	0.0%	0.0%	3.3750	0.00	0.00	0.00		
20-463 Techniset	0.0%	0.0%	8.0%	18.5000	0.00	0.00	6.48		
		Pot	ential Single	HAP Emissions:	Emissions: 0.66 0.00				
		. ••					6.48		
			<b>-</b>						
		. •	<b>-</b>			HAP Emissions:	7.14		
			g						
			<b>-</b>	Material Usage Limitation	Potential Total	HAP Emissions:	7.14		
				Material Usage	Potential Total I	HAP Emissions:	7.14 Controlled		
				Material Usage Limitation	Potential Total I  Controlled  Xylene	HAP Emissions: Controlled	7.14  Controlled Phenol		
			<b>3</b>	Material Usage Limitation VOC	Potential Total I  Controlled  Xylene  Emissions  (ton/yr)	Controlled MDI Emissions (ton/yr)	7.14  Controlled Phenol Emissions (ton/yr)		
			<b>3</b>	Material Usage Limitation	Potential Total I  Controlled  Xylene  Emissions	Controlled MDI Emissions	7.14  Controlled Phenol Emissions		
			<b>3</b>	Material Usage Limitation VOC	Potential Total I  Controlled  Xylene  Emissions  (ton/yr)	Controlled MDI Emissions (ton/yr)  0.00	7.14  Controlled Phenol Emissions (ton/yr)		